FREE FLOAT® DRAIN TRAP

MODEL JAH5RG

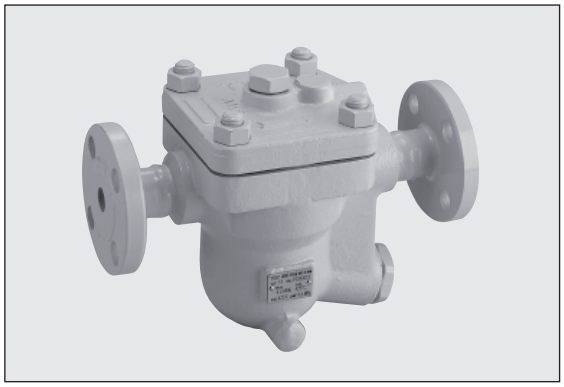
HIGH-PRESSURE FREE FLOAT DRAIN TRAP WITH TIGHT SHUT-OFF FOR AIR AND INERT GAS SERVICE

Benefits

Medium-capacity cast steel* free float trap automatically drains condensate and oil from air and inert gas systems.

1. Self-modulating free float provides continuous, smooth, low-velocity condensate discharge as process loads vary.
2. Precision-ground float and three-point seating provides superior sealing, even under no-load conditions (with rubber orifice).
3. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Built-in screen with large surface area ensures extended trouble-free service.

* Stainless steel body available on request



Specifications

Model		JAH5RG-R (Rubber Orifice)			JAH5RG-M (Metal Orifice)		
Connection		Screwed	Socket Welded	Flanged	Screwed	Socket Welded	Flanged
Size (in)		¾, 1			¾, 1		
Orifice No.		10, 22			G5, G10, G22, G40, G46		
Maximum Operating Pressure (psig)	PMO**	150, 315			75, 150, 315, 600, 650		
Maximum Differential Pressure (psi)	ΔPMX**	150, 315			75, 150, 315, 600, 650		
Minimum Operating Pressure (psig)		1.5					
Maximum Operating Temperature (°F)	TMO	302			800		
Maximum Allowable Pressure (psig)	PMA	650					
Maximum Allowable Temperature (°F)	TMA	800					
Minimum Condensate Load for Tight Sealing (lb/h)		0			2		
Applicable Fluids*		Air, Inert Gases					

* Do not use for toxic, flammable, or otherwise hazardous gases.
** For specific gravities other than 1.00, use table below.

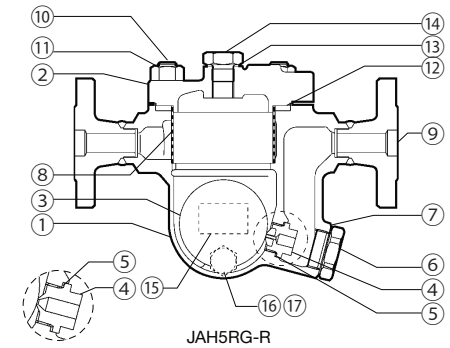
JAH5RG-R, JAH5RG-M are non-standard products, consult TLV for delivery time required.

Model	Orifice No.	Specific Gravity										
		1.00	0.99 – 0.95	0.94 – 0.90	0.89 – 0.85	0.84 – 0.80	0.79 – 0.75	0.74 – 0.70	0.69 – 0.65	0.64 – 0.60	0.59 – 0.55	0.54 – 0.50
		Maximum Operating Pressure PMO (psig) & Maximum Differential Pressure ΔPMX (psi)										
JAH5RG-R	10	150	150	150	150	142	121	100	79	58	37	16
	22	315	315	315	315	315	278	230	181	133	85	37
JAH5RG-M	G5	75	75	75	75	69	59	48	38	28	18	8
	G10	150	150	150	150	142	121	100	79	58	37	16
	G22	315	315	315	315	315	278	230	181	133	85	37
	G40	600	600	600	600	550	469	388	306	225	144	62
	G46	650	650	650	650	607	478	349	220	91	—	—

⚠ CAUTION To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.
Local regulations may restrict the use of this product to below the conditions quoted.
DO NOT use with toxic, flammable or otherwise hazardous fluids.

No.	Description		Material	ASTM/AISI*	JIS
①	Body		Cast Steel	A216 Gr. WCB	—
②	Cover		Carbon Steel	A105	—
③	Float		Stainless Steel	AISI316L	SUS316L
④	Orifice	JAH5RG-R	Fluorine Rubber/Stain. Steel	D2000HK/AISI316L	FPM/SUS316L
		JAH5RG-M	—	—	—
⑤	Orifice Gasket		Soft Iron	AISI1010	SUYP
⑥	Orifice Plug		Cast Stainless Steel	A351 Gr.CF8	—
⑦	Orifice Plug Gasket		Soft Iron	AISI1010	SUYP
⑧	Screen		Stainless Steel	AISI430	SUS430
⑨	Socket**/Flange		Carbon Steel	A105	—
⑩	Cover Bolt		Alloy Steel	A193 Gr.B16	SNB16
⑪	Cover Nut		Carbon Steel	AISI1045	S45C
⑫	Cover Gasket		Graphite/Stainless Steel	– /AISI304	– /SUS304
⑬	Plug Gasket		Soft Iron	AISI1010	SUYP
⑭	Balancing Line Plug		Carbon Steel	AISI1025	S25C
⑮	Nameplate		Stainless Steel	AISI304	SUS304
⑯	Drain Plug Gasket***		Soft Iron	AISI1010	SUYP
⑰	Drain Plug***		Carbon Steel	AISI1025	S25C

* Equivalent ** Shown on reverse *** Option

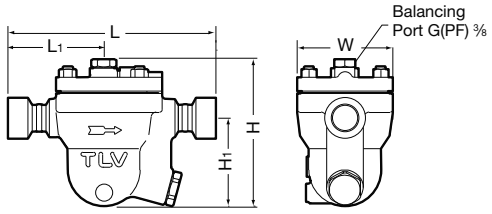


JAH5RG-M (Metal Orifice)

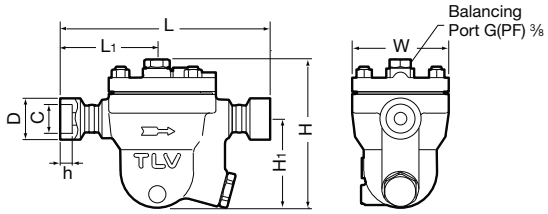
JAH5RG-R (Rubber Orifice)

Dimensions

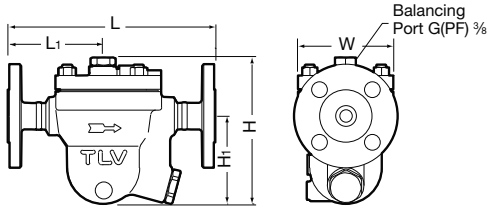
● **JAH5RG** Screwed



● **JAH5RG** Socket Welded



● **JAH5RG** Flanged



JAH5RG Screwed* (in)

Size	L	L1**	H**	H1**	W	Weight (lb)
¾	9 11/16	4 ½	6 7/8	4 1/8	4 ½	15
1	10 1/8	4 ¾				

* NPT, other standards available ** Approx.

JAH5RG Socket Welded (in)

Size	L	L1*	H*	H1*	W	ϕD	ϕC	h	Weight (lb)
¾	9 11/16	4 ½	6 7/8	4 1/8	4 ½	1 9/16	1.065	9/16	15
1	10 1/8	4 ¾				1 7/8	1.330		

* Approx.

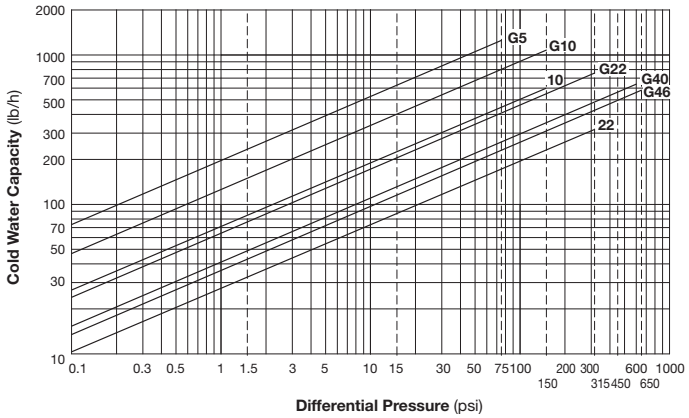
JAH5RG Flanged (in)

Size	L Connects to ASME Class 150RF	L Connects to ASME Class 300RF	L Connects to ASME Class 600RF	L1*	H*	H1*	W	Weight** (lb)
¾	10 3/8	10 3/8	10 3/8	4 3/8	6 7/8	4 1/8	4 ½	22
1	12 3/16	12 3/16	12 3/16	5 ¾				24

Other standards available, but length and weight may vary
* Approx. ** Weight is for Class 600 RF

Note: ● A pressure-balancing line must be connected to the air/gas system from the balancing port at the top of the trap to a place above any possible condensate accumulation in the system.
● Balancing port options: 3/8 or ½ inch, flanged, socket welded or screwed with other thread standards.

Discharge Capacity



1. Line numbers within the graph refer to orifice numbers. Orifice numbers beginning with "G" are for JAH5RG-M (metal orifice); other numbers are for JAH5RG-R (rubber orifice).
2. Differential pressure is the difference between the inlet and outlet pressure of the trap.
3. The chart is applicable to condensate below 212 °F.
4. The discharge capacity is for liquids with a specific gravity of 1. See the Discharge Capacity Conversion Factors table for other specific gravities.
5. Recommended safety factor: at least 1.5.

●**Discharge Capacity Conversion Factors**

Specific Gravity (S.G.)	0.95	0.9	0.85	0.8	0.75	0.7	0.65	0.6	0.55	0.5
Conversion Factor	1.03	1.06	1.08	1.12	1.16	1.19	1.24	1.29	1.35	1.41

Before using the discharge capacity chart, multiply the required capacity (including safety factor) by the appropriate conversion factor for the specific gravity of the liquid to be discharged. Choose from the table above or use the following formula: Conversion Factor = $\frac{1}{\sqrt{S.G.}}$

⚠ CAUTION

DO NOT use this product under conditions that exceed maximum differential pressure, as condensate backup will occur!

⚠ CAUTION

DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.
Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001
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